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LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith. On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent. The editor will be glad to publish any queries consonant with the character of the journal.*

Solar Diffraction Glow.

A FAINT yet clearly perceptible diffraction ring has appeared around the sun for about a week past. It had a pale purplish tint, and at the outer margin faded into the blue sky by almost imperceptible degrees. The centre was tinted nearly to the sun, and was not so bright and white as was the case in Bishop's ring in 1883-85. The part of the ring at $22\frac{1}{2}$ degrees from the sun was little if any brighter than the parts adjacent. The outer margin of the ring reached to 30 degrees, and some days perhaps to 35 degrees. The storms of late September and first days of October cleared away and left the deep blue sky without a cloud or even haze. The colored ring could not be definitely recognized till about noon. After that time it grew brighter till sunset, when the part of the ring which remained above the horizon rapidly changed to a most brilliant violet-purple. The illuminated portion of the sky at sunset was nearly semi-circular and had a greater diameter than the tinted ring of the afternoon, but where the ring had been perceptible during the day, the twilight tints were most intense.

These observations were made in the San Juan Mountains in Colorado, at an altitude of 10,800 feet. I observed Bishop's ring for about two years, and this ring is in several respects different from that.

G. H. STONE.

Ironton, Col., Oct. 12.

Rain-Making.

REASONING from well-established meteorological principles alone, I should say that the probabilities of success in rain-making are quite small. But we have learned that it is hazardous to predict confidently, *a priori*, what nature may do under untried conditions. New principles may be discovered which may modify the operation of those already known. As far as I am informed, reports concerning the results of the experiments being made in the South-west are contradictory. And if rain does follow a few explosions there at this season of the year, when rains occur in most portions of the temperate zones, would that settle the question without dispute?

It seems to me that the effects following great battles have not been recorded with sufficient care to furnish reliable data. When the air in any region is nearly saturated with moisture, it is reasonable to suppose that a violent disturbance in the atmosphere may cause a sufficient condensation to produce rain. But when it is far below saturation, it seems to me that the results must be doubtful until fully established by experiment. Let the experiments be made in places where it seldom or never rains—for instance, in the Sahara. A series of such experiments would determine the question without doubt. I await results with great interest.

MARSHALL HENSHAW.

Amherst, Mass., Oct. 14.

AMONG THE PUBLISHERS.

A BOOK has just been published entitled "The Business of Travel," a fifty years' record of progress, by Fraser Rae, giving in detail an account of the origin and growth of the now marvelously developed organization of Thomas Cook & Son. To scores of thousands who have made pilgrimages to the Meccas of the world as excursionists, guided, directed, and conserved in all interests by this concern, this book, which is packed with information as to travel in this country, in Europe, and in Eastern lands, will be found not only entertaining but instructive.

—The *Publishers' Weekly* says, that, in response to an inquiry, the Assistant Secretary of the Treasury writes the following, which will be of interest to all bookbuyers: "In reply to your letter in which you inquire if you can purchase books in England and have them sent to you by mail, I have to inform you that the importation of dutiable articles, which includes dutiable books, is forbidden by Article XI. of the Universal Postal Union Convention,

and books so imported are subject to seizure. Books printed exclusively in languages other than English, and various other books, are exempt from duty under certain provisions of the Free List, Act of Oct. 1, 1890, and such books are not included in the prohibition.

—John Wiley & Sons have in preparation a "Manual of Mining," by Professor M. C. Ihseng.

—There has been no book written on Hawaii, or the Sandwich Islands, as many still call them, within the last twenty years. But this silence will soon be broken by Mrs. Helen Mather, who has written an account of "One Summer in Hawaii," which the Cassell Publishing Company will publish. Mrs. Mather's book will undoubtedly turn the attention of many travellers toward this little group of islands in the Pacific. It will be illustrated from photographs and drawings made by Walter McDougall, who has had the pleasure of spending part of the summer in Hawaii.

—Miss Isabel F. Hapgood has translated a large number of Tolstoy's books, and Miss Isabel F. Hapgood has been journeying in Russia. What more natural than that she should see "Count Tolstoy at Home," and what still more natural than that she should make this the title and subject of a paper in the November *Atlantic*. Miss Hapgood, although admiring his great gifts, is not a blind adherent of his changeable philosophies. Here is a bit of useful information: the name Tolstoy with the *y* is the writer's own way of spelling his own name, and not a typographical error.

—Little, Brown, & Co. have just ready the ninth edition of Bartlett's "Familiar Quotations," greatly enlarged, and now representing eight hundred and fifty authors and twelve thousand new lines of index, making the volume one-third larger than the previous edition; and "A Narrative of Events Connected with the Introduction of Sulphuric Ether into Surgical Use," by Richard Manning Hodges, A.M., M.D., formerly of the Massachusetts General Hospital.

—All teachers who are interested in seeing the best masterpieces of literature put before school children in an attractive and inexpensive form will be gratified to learn that Houghton, Mifflin, & Co. have just issued, as No. 51 of their Riverside Literature Series (price, in paper covers, 15 cents), "Rip Van Winkle and other American Essays from Washington Irving's Sketch Book." In addition to "Rip Van Winkle," the book contains the famous "Legend of Sleepy Hollow," "Philip of Pokanoket," introductions and explanatory notes, and a biographical sketch of the author. Early in December, No. 52 of the same series will appear, containing "The Voyage and other English Essays from the Sketch Book."

—The Peruvian traveller and linguist, J. J. von Tschudi, lately deceased, had been successful in collecting almost all the books, pamphlets, and treatises that had ever appeared in the Quichua language, still the most important idiom of that extensive country. Among the few oldest books which he had never been able to see is the grammar of the Dominican priest Domingo de Sancto Thomas, "Arte de la lengua Quichua." The well-known republisher of South American linguistic books, Dr. Julius Platzmann, has been fortunate enough to secure a copy at a pretty steep price, and has now reproduced it in a fac-simile edition, for sale at B. G. Teubner's, Leipzig. It is a neat little sedecimo in small Gothic print, containing a *prologo* and ninety-six leaves (192 pages). Old Indian grammars of those times are fashioned after the model of the Latin language, and this one makes no exception. It was the first grammar of the Quichua language, and evinces an uncommonly thorough study of it. It is dated Valladolid, 1560. The Quichua lexicon of this author is of the same date, and is the first print in which the name "Quichua," which is the name of a Peruvian tribe of the Andahuaylas district, has been applied to this language.

—Messrs. J. B. Lippincott Company announce for early publication the "Life of Benjamin Harris Brewster," by Eugene Coleman Savidge, M.D. Mr. Brewster took an active and important part in many of the most critical and exciting movements in our recent national history. He knew more or less intimately every American celebrity since the time of Webster and Clay, and his

biography will be a valuable contribution to the history of the last half-century of our national life. The second volume of "Hermetic Philosophy," by Styx of the "H. B. of L." will soon be issued by the same publishers. As in the first volume, it includes lessons, general discourses, and explanations of "Fragments" from the schools of Egypt, Chaldea, Greece, Italy, etc., and is a continuation of the line of thought treated in that work. One of the acquisitions to medical literature of the year will be the new edition of Professor Roberts Bartholow's "Hypodermatic Medication," about to be issued from the press of the same company.

—The J. B. Lippincott Company of Philadelphia have published an octavo volume entitled "Harmony of Ancient History," by Malcomb Macdonald. It is an attempt to determine the dates of the best known events in Oriental History and to harmonize the chronology of the Egyptians with that of the Jews. Our knowledge of Egyptian chronology was formerly confined to the statements of the Greek historian Manetho, but we now have the testimony of the Egyptian monuments to aid us; yet the best modern authorities differ by many centuries as to the dates of Egyptian kings. On the other hand, the Bible chronology, besides being sometimes inconsistent with itself, is not in accord with that of Egypt and other nations, and the result is a mass of doubt and confusion. Mr. Macdonald has here endeavored to fix the dates of some Egyptian kings by means of astronomical phenomena recorded on the monuments whose occurrence our modern astron-

omy enables us to verify. He then proceeds to the Jewish chronology with the avowed purpose of showing that it harmonizes with that of Egypt and Assyria; and he claims for his scheme that "there is not one single chronological statement in the Bible from which it does not remove all improbability." To attain this end, however, he is obliged to resort to some devices and interpretations that seem forced and arbitrary, and he admits that "the whole scheme rests largely on circumstantial evidence." For our part we doubt if any reconciliation of the ancient chronologies is possible, the gaps in the monumental records being so great and other ancient histories so largely mythical as to preclude a satisfactory solution of the problem; but Mr. Macdonald has made an elaborate attempt at such reconciliation, and we leave the criticism of his work to those who have made a special study of the subject.

—The newest of important educational movements, "University Extension," will have first place in the *Popular Science Monthly* for November. The article is by Professor C. Hanford Henderson, and, after sketching what has been done in England, it describes the beginning that has been made in this country, and tells the plans of the extension organizers for the future. In the same number Mr. W. F. Durfee will conclude his contributions to the series of illustrated articles on the development of American industries with a paper on "The Manufacture of Steel." This paper completes the account of the Bessemer process, and proves

Publications received at Editor's Office,
Oct. 14-20.

- BARNES, M. S., and BARNES, E. *Studies in American History*. Boston, Heath. 431 p. 12°. \$1.25.
GREENE, D. *An Introduction to Spherical and Practical Astronomy*. Boston, Ginn. 158 p. 8°. \$1.60.
HARVARD COLLEGE, *Annals of the Astronomical Observatory of*. Vol. XXVI, Part I. Preparation and Discussion of the Draper Catalogue. Cambridge, University Press. 192 p. 4°.
— *Annals of the Astronomical Observatory of*. Vol. XXX, Part II. Observations made at the Blue Hill Meteorological Observatory, in the year 1890. Cambridge, University Press. 201 p. 4°.
WHITING, H. *A course of Experiments in Physical Measurements*. Part IV. Appendix for the use of Teachers. Boston, Heath. 326 p. 8°.

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I have five vols. of "Olhausen's" Biblical Commentary on the New Testament that I would like to sell or exchange for works on geology of North America.

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—Bradlee Whidden will publish, about Nov. 15, "Modern American Rifles," by A. C. Gould (Ralph Greenwood), a work which will discuss the merits and capabilities as well as the advancement made in the American rifle.

—The *Chautauquan* for November has several illustrated articles and the portraits of a number of prominent women. The following titles are from the table of contents: "Physical Life," II., by Milton J. Greenman; "National Agencies for Scientific Research," II., by Major J. W. Powell; "The Adulteration of Foods," by Guilford L. Spencer; "Potters and Their Craft," by Thomas B.

Preston; "Social Science in the Pulpit," by John Habberton; "People and Places," by Daniel C. Gilman, LL.D.; "Women's Clubs in London," by Elizabeth Robins Pennell; "Among the Creoles," by Mary L. Schaffter; "The Prevention of Crime," by Mrs. Kate Tannatt Woods; "Women as Astronomers" (first paper), by Esther Singleton; and "Cremation," by Anna Churchill Carey.

—D. C. Heath & Co., Boston, will issue in November "Herbert's Allgemeine Pädagogik," translated by Henry M. Felkin of London, and edited, with an introduction, by Oscar Browning, author of "Educational Theories."

—In the November issue of the *New England Magazine*, Walter Blackburn Harte makes a plea for a world without books. He thinks that education is not an unmixed blessing, as the greater the intelligence of individuals and peoples the greater is their capacity for suffering.

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